REMARKS

This Amendment responds to the office action dated January 4, 2008.

The examiner has rejected claims 1-3, 7 and 8 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,985,245 by Takahashi (hereinafter Takahashi). Claim 1 is independent. Claims 2, 3, 7 and 8 are dependent on claim 1 and comprise all the elements therein by dependence.

This rejection fails to present a prima facie case of anticipation as Takahashi does not teach all the elements of these claims. Takahashi teaches a server-based system (Fig. 1, 102) wherein client computing devices 103 send PDL print jobs to a network print server 102, which distributes the print jobs to one or more printing devices 104, 105 and 107. The method of Takahashi requires an extensive network system with a dedicated server and works outside the typical print system process by creating PDL files, which are then modified by the server. The methods of these rejected claims work within the typical print system process, which comprises a print driver and spooler. These claims comprise the elements of:

combining said print task with said cluster printing selection thereby creating driver-dependent data;

transmitting said driver-dependent data to a printer driver;

creating spool data from said driver-dependent data;

determining portions of said spool data to be distributed to each of said specific printing devices; and

distributing said portions of said spool data among said specific printing devices with said print system component, said distributing comprising concurrent

parallel playback of said portions of said spool data, to each of said specific printing devices. These elements are not taught in Takahashi.

The server of Takahashi accepts PDL data that has already been processed by the client print driver, which has taken client application output or a saved data file and converted it to a PDL-language file. The present claims describe a process in which the cluster data is combined with a print job that is processed by a print driver to yield spool data. This is not taught in Takahashi, as Takahashi teaches temporary spooling followed by processing into a PDL language (col. 29, lines 45-51) before subsequent processing into cluster jobs. The examiner relies on Takahashi (col. 29, line 21 to col. 30, line 14) to teach this element. However, this reference at this location teaches away from the method of the current claims by teaching that the spool data is processed into PDL data before any manipulation or distribution to printing devices.

Takahashi, further, does not teach determining portions of spool data to be distributed to different printing devices. Takahashi does not deal with spool data at all, but, instead, post-processes PDL data that is downstream from the spool data.

Furthermore, Takahashi does not teach concurrent parallel playback of said portions of said spool data, to each of said specific printing devices. Takahashi does not mention parallel playback and does not mention playback of spool data as the spool data is converted to PDL before any further manipulation.

Accordingly, the examiner is respectfully requested to withdraw this rejection.

The examiner has rejected claim 4 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,985,245 by Takahashi (hereinafter Takahashi) in view of U.S. Patent No. 7,139,085 by Sakaguchi (hereinafter Sakaguchi).

This rejection is improper as it fails to present a prima facie case of obviousness. The combination of Takahashi and Sakaguchi do not teach elements of this claim. Claim 4 comprises the elements listed above in reference to claim 1 as well as the element of:

prompting a user for said cluster printing selection, wherein

said prompting only allows selection of printing devices with

capabilities that match requirements of said print task,

which is not taught in the combination of Takahashi and Sakaguchi.

Sakaguchi teaches a method in which a printer group is selected, the capabilities of printers in the group are determined, the print job requirements are determined and a message is displayed informing the user that some printers in the group are not capable of printing the print job, after which a user is given the option to cancel the print job or send the job to the printers that are capable of handling the print job. However, Sakaguchi does not teach the use of a prompt that limits the user's selection of printers to a set of printers that are capable of meeting print job requirements. The method of the current claim limits the user's selection by automatic limitation of the set from which the user selects printers while Sakaguchi allows selection of a group that will not meet job requirements and then alerts the user and restricts the print job after the selection has already been made. The claim language is specific and is not taught in Sakaguchi.

The examiner has rejected claim 5 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,985,245 by Takahashi (hereinafter Takahashi) in view of U.S. Patent No. 5,287,194 by Lobiondo (hereinafter Lobiondo).

This rejection is improper as it fails to present a prima facie case of obviousness. The combination of Takahashi and Lobiondo does not teach all the elements of claim 5. Claim 5 is dependent on claim 1 and comprises all the elements therein. The combination of Takahashi and Lobiondo does not teach manipulation of spool data or parallel playback as well as other elements listed above in relation to claim 1. Accordingly, the examiner is respectfully requested to withdraw this rejection.

The examiner has rejected claims 6, 9-13, 15, 16, 18, 19, 23 and 24 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,985,245 by Takahashi (hereinafter Takahashi) in view of U.S. Patent No. 5,287,194 by Lobiondo (hereinafter Lobiondo).

Claims 1, 11, 18, 23 and 24 are independent claims. Claims 6, 9 and 10 depend from claim 1. Claims 12, 13, 15 and 16 depend from claim 11. Claim 19 depends from claim 18.

This rejection is improper as it fails to present a prima facie case of obviousness. The combination of Takahashi and Lobiondo does not teach all the elements of claim the rejected claims. Claims 6, 9 and 10 claim, by dependence, the elements of:

> combining said print task with said cluster printing selection thereby creating driver-dependent data;

> transmitting said driver-dependent data to a printer driver;

> creating spool data from said driver-dependent data;

determining portions of said spool data to be distributed to each of said

specific printing devices; and

distributing said portions of said spool data among said specific printing

devices with said print system component, said distributing comprising concurrent

parallel playback of said portions of said spool data, to each of said specific

printing devices.

These elements are not taught in the combination of Takahashi and Lobiondo. Takahashi

teaches a method for post-processing a PDL file to arrive at distribution to multiple printers.

Lobiondo teaches a method of serial distribution of a print job to multiple printers. Neither, nor

the combination thereof, teaches: combining cluster print data with print data to create pre-

driver, driver-dependent data; determining portions of spool data to be distributed; and

distributing portions of spool data to multiple printers. Neither of these references manipulate

spool data to achieve their functions.

Claims 12, 13, 15 and 16 depend from claim 11 and comprise all the limitations therein.

Claim 11 comprises the elements of:

combining said print task with said cluster printing selection
thereby creating driver-dependent data;

determining portions of said spool data to be distributed to each of
said specific printing devices; and

determining the output capacity of said specific printing devices;
and

despooling said spool data in accordance with said cluster printing

selection wherein said despooling comprises distribution of said print task

to said specific printing devices in substantial proportion to each of said

specific printing device's output capacity and wherein said despooling

further comprises concurrent parallel playback of spool data to printer

drivers corresponding to each of said specific printing devices.

These elements are not taught in the combination of Takahashi and Lobiondo.

Takahashi teaches a method for post-processing a PDL file to arrive at distribution to

multiple printers. Lobiondo teaches a method of serial distribution of a print job to

multiple printers. Neither, nor the combination thereof, teaches: combining cluster print

data with print data to create pre-driver, driver-dependent data; determining portions of

spool data to be distributed; and distributing portions of spool data to multiple printers

with parallel concurrent playback. Neither of these references manipulate spool data to

achieve their functions and, therefore, do not teach these elements.

Claim 18 is independent. Claim 19 depends from claim 18. Both claims comprise the

elements of:

      combining said print task with said cluster printing selection thereby
creating driver-dependent data;

      modifying said spool data according to said cluster printing
selection; and

      despooling said spool data in accordance with said cluster printing

selection wherein said despooling comprises distribution of said print task

to said specific printing devices in substantial proportion to each of said

specific printing device's output capacity and wherein said despooling

further comprises concurrent parallel playback of spool data to multiple

printer drivers.

These elements are not taught in the combination of Takahashi and Lobiondo.

Takahashi teaches a method for post-processing a PDL file to arrive at distribution to

multiple printers. Lobiondo teaches a method of serial distribution of a print job to

multiple printers. Neither, nor the combination thereof, teaches: combining cluster print

data with print data to create pre-driver, driver-dependent data; determining portions of

spool data to be distributed; and distributing portions of spool data to multiple printers

with parallel concurrent playback. Neither of these references manipulate spool data to

achieve their functions and, therefore, do not teach these elements.

Claim 23 comprises the elements of:

> a combiner for combining said print task with said cluster printing
> selection thereby creating driver-dependent data;

> a modifier for modifying said spool data according to said cluster
> printing selection;

> a portioner for determining portions of said spool data to be
> distributed to each of said specific printing devices; and
> a despooler for despooling said spool data portions in accordance

with said cluster printing selection wherein said despooling comprises

distribution of said spool data portions to said specific printing devices

in substantial proportion to each of said specific printing device's output

capacity and wherein said despooling further comprises concurrent

parallel playback of spool data to multiple printer drivers.

These elements are not taught in the combination of Takahashi and Lobiondo.

Takahashi teaches a method for post-processing a PDL file to arrive at distribution to

multiple printers. Lobiondo teaches a method of serial distribution of a print job to

multiple printers. Neither, nor the combination thereof, teaches: combining cluster print

data with print data to create pre-driver, driver-dependent data; determining portions of

spool data to be distributed; and distributing portions of spool data to multiple printers

with parallel concurrent playback. Neither of these references manipulate spool data to

achieve their functions and, therefore, do not teach these elements.

Claim 24 comprises the elements of:

combining said print task with said cluster printing selection thereby
creating driver-dependent data;

modifying said spool data according to said cluster printing
selection;

determining portions of said spool data to be distributed to each of
said specific printing devices; and

despooling said spool data in accordance with said cluster printing

selection wherein said despooling comprises distribution of said spool data

portions to said specific printing devices in substantial proportion to each

of said specific printing device's output capacity and wherein said

despooling further comprises concurrent parallel playback of spool data to

multiple printer drivers.

These elements are not taught in the combination of Takahashi and Lobiondo.

Takahashi teaches a method for post-processing a PDL file to arrive at distribution to

multiple printers. Lobiondo teaches a method of serial distribution of a print job to

multiple printers. Neither, nor the combination thereof, teaches: combining cluster print

data with print data to create pre-driver, driver-dependent data; determining portions of

spool data to be distributed; and distributing portions of spool data to multiple printers

with parallel concurrent playback. Neither of these references manipulate spool data to

achieve their functions and, therefore, do not teach these elements.

The examiner has rejected claims 14 and 17 under 35 U.S.C. §103(a) as being

unpatentable over U.S. Patent No. 6,985,245 by Takahashi (hereinafter Takahashi) in view of

U.S. Patent No. 6,049,394 by Fukushima (hereinafter Fukushima). Claims 14 and 17 depend

from claim 11 and comprise all the elements therein.

Claim 11 comprises the elements of:

> combining said print task with said cluster printing selection
> thereby creating driver-dependent data;

> determining portions of said spool data to be distributed to each of
> said specific printing devices; and

> despooling said spool data in accordance with said cluster printing

selection wherein said despooling comprises distribution of said print task

to said specific printing devices in substantial proportion to each of said

specific printing device's output capacity and wherein said despooling

further comprises concurrent parallel playback of spool data to printer

drivers corresponding to each of said specific printing devices.

These elements are not taught in the combination of Takahashi and Fukushima.

Takahashi teaches a method for post-processing a PDL file to arrive at distribution to

multiple printers. Fukushima teaches serial processing of image color components and

determination of printer characteristics by communication with a printer driver. Neither,

nor the combination thereof, teaches: combining cluster print data with print data to

create pre-driver, driver-dependent data; determining portions of spool data to be

distributed; and distributing portions of spool data to multiple printers with parallel

concurrent playback. Neither of these references manipulate spool data to achieve their

functions and, therefore, do not teach these elements.

The examiner has rejected claim 20 under 35 U.S.C. §103(a) as being unpatentable over

U.S. Patent No. 6,985,245 by Takahashi (hereinafter Takahashi) in view of U.S. Patent No.

6,665,082 by Takeoka et al (hereinafter Takeoka). Claim 20 depends from claim 18 and

comprises all the elements therein.

Claim 18 comprises the elements of:

combining said print task with said cluster printing selection thereby
creating driver-dependent data;

     modifying said spool data according to said cluster printing

selection; and

     despooling said spool data in accordance with said cluster printing

selection wherein said despooling comprises distribution of said print task

to said specific printing devices in substantial proportion to each of said

specific printing device's output capacity and wherein said despooling

further comprises concurrent parallel playback of spool data to multiple

printer drivers.

These elements are not taught in the combination of Takahashi and Takeoka.

Takahashi teaches a method for post-processing a PDL file to arrive at distribution to

multiple printers. Takeoka teaches a method of isochronous transfer of image data to a

printer and mentions the term "storage capacity" in relation to a printer's buffer memory.

Neither, nor the combination thereof, teaches: combining cluster print data with print data

to create pre-driver, driver-dependent data; determining portions of spool data to be

distributed; and distributing portions of spool data to multiple printers with parallel

concurrent playback. Neither of these references manipulate spool data to achieve their

functions and, therefore, do not teach these elements. Furthermore, the examiner cites

Takeoka as teaching distribution of a print task based on a printer's disk storage capacity,

however, Takeoka's reference to printer storage capacity refers to the buffer memory

instead of a disk storage capacity. Therefore, this aspect of claim 20 is not taught by

Takeoka either. Accordingly, the examiner is respectfully requested to withdraw this

rejection.

The examiner has rejected claims 21 and 22 under 35 U.S.C. §103(a) as being

unpatentable over U.S. Patent No. 6,985,245 by Takahashi (hereinafter Takahashi) in view of

U.S. Patent No. 6,891,632 by Schwartz (hereinafter Schwartz). Claims 21 and 22 depend from

claim 18 and comprise all the elements therein.

Claim 18 comprises the elements of:

combining said print task with said cluster printing selection thereby
creating driver-dependent data;

modifying said spool data according to said cluster printing
selection; and

despooling said spool data in accordance with said cluster printing

selection wherein said despooling comprises distribution of said print task

to said specific printing devices in substantial proportion to each of said

specific printing device's output capacity and wherein said despooling

further comprises concurrent parallel playback of spool data to multiple

printer drivers.

These elements are not taught in the combination of Takahashi and Schwartz.

Takahashi teaches a method for post-processing a PDL file to arrive at distribution to

multiple printers. Schwartz teaches a method of rasterization of a print job on a host PC

when the print job is too complex to be rasterized on the printer in a given time frame.

While Schwartz teaches a determination of a printer's print speed or rasterization speed,

it does not teach analysis of the rasterization pipeline. Regardless of this distinction,

neither reference , nor the combination thereof, teaches: combining cluster print data with

print data to create pre-driver, driver-dependent data; determining portions of spool data

to be distributed; and distributing portions of spool data to multiple printers with parallel

concurrent playback. Neither of these references manipulate spool data to achieve their

functions and, therefore, do not teach these elements. Accordingly, the examiner is

respectfully requested to withdraw this rejection.

Based on the foregoing remarks, the Applicant respectfully requests reconsideration and

allowance of the present application.

Respectfully submitted,

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